Docket No. 1514.1039

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Min-Chul SUH

Application No. 10/757,471 Group Art Unit: 1774

Confirmation No. 4143

Filed: January 15, 2004 Examiner: Dawn L. Garrett

For: ORGANIC ELECTROLUMINESCENT DEVICE DRIVEN AT LOW VOLTAGE

DECLARATION UNDER 37 CFR 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Mu-Hyun KIM, declare as follows:

1. I have a degree in chemical engineering from KAIST (Korea Advanced Institute of Science & Technology)

2. I have 7 years of experience in the field of AMOLED, and am aware of the state of the art in that field from material to process.

3. I am an employee of Samsung SDI Co., Ltd., the assignee of the present application identified above.

4. I am one of the inventors of copending Application No. 10/839,338 relied on by the Examiner in the nonstatutory obviousness-type double patenting rejection of claims 1-4 in the Office Action of June 29, 2007, issued in the present application.

5. The present application was filed on January 15, 2004, and claims the benefit of Korean Patent Application No. 2003-6617 filed on February 3, 2003 (the Korean priority application of the present application).

6. The subject matter of the present application is in the field of electroluminescent devices.

7. I have reviewed and understand the present application and the rejections of claims 7 and 12 under 35 USC 112, first and second paragraphs, in the Office Action of June 29, 2007, issued in the present application.

8. In the Office Action of June 29, 2007, issued in the present application, the Examiner has rejected claims 7 and 12 under 35 USC 112, first paragraph, as failing to comply with the enablement requirement, stating as follows in explaining the rejection:

> The claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The subject matter of claims 7 and 12 including variables "R", "R_2" and "R_3" is not described in the specification in such a way that one of ordinary skill in the art could make or use a compound having these undefined and non-described variables.

9. In the Office Action of June 29, 2007, issued in the present application, the Examiner has rejected claims 7 and 12 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention, stating as follows in explaining the rejection:

> Claims 7 and 12 recite formulas comprising variables "R", "R_2" and "R_3". The variables are undefined and therefore considered indefinite.

10. The terms R, R_2, and R_3 referred to by the Examiner appear in original paragraph [0036] of the specification of the present application, which reads as follows:

> **[0036]** The electron donor material is one of an aromatic, an olefin, an allene, a thiophene and a fulvalene heterocyclic compound containing hydrogen, an alkyl group, a phenyl group, an NR_2 group, an OR group and a SiR_3 group, or one or more electron donor materials selected from the group consisting of poly(3,4-ethylene-dioxythiophene), tetraphenylethylene, azulene, 1,2,3,4-tetraphenyl-1,3-cyclophentadiene, and bis(ethylenedithio)tetrathiafulvalene.

11. The terms R, R_2, and R_3 referred to by the Examiner also appear in the original and current versions of claims 7 and 12 of the present application. The current versions of claims 7 and 12 recite the following feature:

> wherein the electron donor material is selected from the group consisting of:
>
> an aromatic compound having hydrogen, an alkyl group, a phenyl group, an NR_2 group, an OR group, or an SiR_3 group;
>
> an olefin compound having hydrogen, an alkyl group, a phenyl group, an NR_2 group, an OR group, or an SiR_3 group;
>
> an allene compound having hydrogen, an alkyl group, a phenyl group, an NR_2 group, an OR group, or an SiR_3 group;
>
> a thiophene compound having hydrogen, an alkyl group, a phenyl group, an NR_2 group, an OR group, or an SiR_3 group;
>
> a fulvalene heterocyclic compound having hydrogen, an alkyl group, a phenyl group, an NR_2 group, an OR group, or an SiR_3 group;
>
> poly(3,4-ethylene-dioxythiophene);
>
> tetraphenylethylene;
>
> azulene;
>
> 1,2,3,4-tetraphenyl-1,3-cyclophentadiene; and
>
> bis(ethylenedithio)tetrathiafulvalene.

12. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices would have understood that the term R is a standard notation in the field of organic chemistry that stands for any organic radical.

13. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices, upon reviewing the present application, would have understood that the term OR in claims 7 and 12 stands for an organic group constituted by an O atom having any organic radical R bonded thereto.

14. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices, upon reviewing the present application, would have understood that the term NR_2 in

claims 7 and 12 stands for an organic group constituted by an N atom having any two organic radicals R bonded thereto, where the two organic radicals can be the same R, or two different Rs.

15. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices, upon reviewing the present application, would have understood that the term SiR_3 in claims 7 and 12 stands for an organic group constituted by an Si atom having any three organic radicals R bonded thereto, where the three organic radicals can be the same R, or two of the three organic radicals can be the same R and the other organic radical can be a different R, or the three organic radicals can be three different Rs.

16. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices would have known how to determine whether any particular aromatic compound having an NR_2 group, or an OR group, or an SiR_3 group as recited in claims 7 and 12 is in fact an electron donor material as recited in claims 7 and 12.

17. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices would have known how to determine whether any particular olefin compound having an NR_2 group, or an OR group, or an SiR_3 group as recited in claims 7 and 12 is in fact an electron donor material as recited in claims 7 and 12.

18. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices would have known how to determine whether any particular allene compound having an NR_2 group, or an OR group, or an SiR_3 group as recited in claims 7 and 12 is in fact an electron donor material as recited in claims 7 and 12.

19. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices would have known how to determine whether any particular thiophene compound having an NR_2 group, or an OR group, or an SiR_3 group as recited in claims 7 and 12 is in fact an electron donor material as recited in claims 7 and 12.

20. At the time the Korean priority application of the present application was filed on February 3, 2003, one of ordinary skill in the art in the field of organic electroluminescent devices would have known how to determine whether any particular fulvalene heterocyclic compound having an NR_2 group, or an OR group, or an SiR_3 group as recited in claims 7 and 12 is in fact an electron donor material as recited in claims 7 and 12.

21. Pursuant to 35 USC 25 and 37 CFR 1.68, I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

Date: 2007. 9. 19

Mu-Hyun KIM